

Mitchell County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Mitchell County economy.¹

These 17 sectors have a total direct output of approximately **\$300.0 million** and support **831 jobs** in Mitchell County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Mitchell County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	831.1	16.69%	\$53,647,219	15.88%	\$300,049,203	88.82%
Indirect Effect	422.1	8.48%	\$39,808,361	11.78%	\$63,690,014	18.85%
Induced Effect	269.1	5.40%	\$19,416,467	5.75%	\$33,206,165	9.83%
Total Effect	1522.2	30.57%	\$112,872,048	33.41%	\$396,945,382	117.51%

As shown in the above table, agriculture, food, and food processing sectors support **1,522 jobs**, or **30.57%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$396.9 million**, roughly **117.51% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$112.9 million**, or **33.41% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **33.41% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the commercial hunting and trapping sector is the top employer with **280 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Mitchell County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	279.8	\$46,529,475
Farm machinery and equipment manufacturing	243.0	\$119,741,666
Wholesale trade	122.5	\$24,041,927
Grain farming	103.1	\$51,022,492
Support activities for agriculture and forestry	97.7	\$10,045,591
Commercial hunting and trapping	79.5	\$341,145
Other animal food manufacturing	36.9	\$49,079,186
Truck transportation	36.6	\$5,683,337
Monetary authorities and depository credit intermediation	31.1	\$5,809,958
Real estate	27.1	\$7,043,310

The farm machinery and equipment manufacturing sector directly contributes approximately **\$119.7 million** to the Mitchell County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	243.0	\$119,741,666
Grain farming	103.1	\$51,022,492
Other animal food manufacturing	36.9	\$49,079,186
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	279.8	\$46,529,475
Wholesale trade	122.5	\$24,041,927
Oilseed farming	16.0	\$21,629,885
Support activities for agriculture and forestry	97.7	\$10,045,591
Owner-occupied dwellings	0.0	\$7,047,991
Real estate	27.1	\$7,043,310
Monetary authorities and depository credit intermediation	31.1	\$5,809,958

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Mitchell County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	16.0	\$21,629,885.08
Grain farming	103.1	\$51,022,492.30
Fruit farming	0.7	\$45,701.20
Greenhouse, nursery, and floriculture production	10.0	\$1,064,889.81
All other crop farming	25.5	\$2,561,309.86
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	279.8	\$46,529,474.51
Poultry and egg production	3.1	\$2,239,849.91
Animal production, except cattle and poultry and eggs	9.7	\$1,465,819.78
Commercial logging	0.9	\$159,936.72
Commercial hunting and trapping	79.5	\$341,145.41
Other animal food manufacturing	36.9	\$49,079,186.14
Meat processed from carcasses	3.6	\$1,829,019.34
Bread and bakery product, except frozen, manufacturing	5.5	\$627,900.12
Frozen cakes and other pastries manufacturing	0.3	\$51,230.19
Farm machinery and equipment manufacturing	243.0	\$119,741,666.09
Veterinary services	9.8	\$934,091.14
Landscape and horticultural services	3.8	\$725,605.09

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Mitchell County, the retail sector was omitted.